From: <u>Granger, Michelle</u>

To: Hauber, Erin M CIV USARMY CENWK (US)
Cc: Watts, Joshua A CIV USARMY CENWK (US)

Subject: RE: Pohatcong OU3 PDI Field Activities Status Call Summary - June 5, 2018

**Date:** Monday, June 25, 2018 2:51:19 PM

Hi, Erin-

Yes, please send invite to Kim and I for call on Monday morning. 10am works on this end. Also, I'm going to request that we move the Monday, July 2nd call to 1:30pm. Just wanted to let you know.

Thank you! Michelle-

From: Hauber, Erin M CIV USARMY CENWK (US) [Erin.M.Hauber@usace.army.mil]

Sent: Monday, June 25, 2018 1:47 PM

To: Granger, Michelle

Cc: Watts, Joshua A CIV USARMY CENWK (US)

Subject: RE: Pohatcong OU3 PDI Field Activities Status Call Summary - June 5, 2018

Michelle,

We are available tomorrow 10AM EST or 1400-1500 EST or Monday AM, July 2nd. If we receive PRP's EVS model and recommendations later this week, it may be better to wait until Monday AM to discuss data gaps vs. their proposal. If Bruce and/or Stan can include us on any submittals to you later this week, we should be ready to discuss Monday AM.

Erin

----Original Message-----

From: Watts, Joshua A CIV USARMY CENWK (US)

Sent: Monday, June 25, 2018 8:12 AM

To: Granger, Michelle < Granger. Michelle @epa.gov>

Cc: Brink, Bradley J CIV USARMY CENWK (US) <Bradley.J.Brink@usace.army.mil>; Hauber, Erin M CIV USARMY CENWK (US) <Erin.M.Hauber@usace.army.mil>; L'Ecuyer, Jason R CIV USARMY CENWK (US)

<Jason.R.LEcuyer@usace.army.mil>; Stonestreet, Wendy E CIV USARMY CENWK (US)

<Wendy.E.Stonestreet@usace.army.mil>; Hattan, Gregory N CIV USARMY CENWK (US)

<Gregory.N.Hattan@usace.army.mil>

Subject: RE: Pohatcong OU3 PDI Field Activities Status Call Summary - June 5, 2018

Good morning Michelle,

Just wanted to follow up and see if you still wanted to discuss this prior to the call with Ramboll.

Thanks, Josh

----Original Message----

From: Granger, Michelle [mailto:Granger.Michelle@epa.gov]

Sent: Monday, June 18, 2018 8:42 AM

To: Watts, Joshua A CIV USARMY CENWK (US) < Joshua. A. Watts@usace.army.mil>

Cc: Brink, Bradley J CIV USARMY CENWK (US) <Bradley.J.Brink@usace.army.mil>; Hauber, Erin M CIV USARMY CENWK (US) <Erin.M.Hauber@usace.army.mil>; L'Ecuyer, Jason R CIV USARMY CENWK (US) <Jason.R.LEcuyer@usace.army.mil>; Stonestreet, Wendy E CIV USARMY CENWK (US)

<Wendy.E.Stonestreet@usace.army.mil>

Subject: [Non-DoD Source] RE: Pohatcong OU3 PDI Field Activities Status Call Summary - June 5, 2018

Hi. Josh-

Thank you for the summary and recommendations below. I will review and discuss with management. I think a call prior to the call with Ramboll will be helpful. I am hoping to talk with Kim tomorrow, so I'll keep you posted.

Thank you! Michelle-

From: Watts, Joshua A CIV USARMY CENWK (US) [Joshua.A.Watts@usace.army.mil]

Sent: Friday, June 15, 2018 11:49 AM

To: Granger, Michelle

Cc: Brink, Bradley J CIV USARMY CENWK (US); Hauber, Erin M CIV USARMY CENWK (US); L'Ecuyer,

Jason R CIV USARMY CENWK (US); Stonestreet, Wendy E CIV USARMY CENWK (US)

Subject: RE: Pohatcong OU3 PDI Field Activities Status Call Summary - June 5, 2018

Michelle,

Below is the narrative Brad put together summarizing our review of the existing data. We included some of our recommendations to consider, but we'd like to hear Ramboll's plan. Figure 1 identifies the general areas where we feel additional investigation is recommended, or not recommended. The remaining attachments are just for quick reference as you review the narrative.

Let me know if you would like to discuss this prior to the end of the month call. I'll set up a conference call if needed.

## **Existing Data**

- \* Two existing RI deep soil borings PPP-SBD-204 and PPP-SBD-205 are located southwest of the clean room and were drilled to 105 feet bgs and 125 feet bgs, respectively. The majority of the TCE results were non-detect with a few J coded results below the action level. Boring logs, data tables and summary tables for these borings are attached.
- \* No deep soil borings are present north, south, or east of the clean room or within the clean room.
- \* Monitoring well POHMW2 is located north of the clean room and is screened from 121 to 131 feet bgs. TCE concentrations in this well have generally fluctuated between ND and 3 ug/L from 1990 to 2006. In 2007, TCE was detected in the well at 52 ug/L from a diluted sample. See Plate 1. No TCE data was located for POHMW2 after 2007.
- \* Monitoring wells POHMW1 and POHMW9 are located east of the clean room and are screened from 127 to 137 feet bgs and 220 to 245 feet bgs, respectively. Both wells have been ND for TCE. See Plate 1. Recent

groundwater data from the annual MNA reports continues to show ND for TCE at POHMW1. No TCE data was located from POHMW9 after 2009.

\* PDI soil borings PDI-SB25 and PDI-SB26 located just west of the clean room were sampled to 122.5 feet bgs. TCE contamination at these locations was detected above the action level at the bottom of each boring and at depths deeper than any of the other deep boring drilled beneath the building.

Data Gaps

\* The extent of TCE contamination above the action level has not be delineated to the east, north, or south of PDI borings PDI-SB25 and PDI-SB26. Additionally, the extent of TCE contamination above the action level was not delineated vertically at these locations.

Recommendations/Considerations

- \* Install one vertical deep soil boring north of PDI-SB25 and one south of PDI-SB26 to delineate the northern and southern extent of TCE contamination above the action level within the portion of the building currently accessible by drill rig.
- \* Install deep soil borings to the east of PDI-SB25 and PDI-SB26 within the clean room, if accessible, to delineate TCE contamination above action levels. The number and locations of borings TBD based on accessibility and analytical results. If the clean room is not accessible by drill rig, angle borings are recommended along the exterior of the building at multiple locations to the east, south, and north to obtain samples from beneath the clean room. Number and locations TBD.
- \* All boings should be drilled to the top of competent bedrock to define the vertical extent of contamination.
- \* Depending on the extent and concentration of TCE detected beneath the clean room portion of the building, an additional monitoring well may be warranted within and/or south of the clean room.

Let me know if you have any questions.

Thanks, Josh

Joshua A. Watts, PE, PMP Project Manager U.S. Army Corps of Engineers 601 E. 12th Street Kansas City, MO 64106-2896 Office: (816) 389-3199

Cell: (816) 266-3785

----Original Message-----From: Hauber, Erin M CIV USARMY CENWK (US) Sent: Thursday, June 7, 2018 11:29 AM

To: Granger, Michelle < Granger. Michelle @epa.gov>

Cc: Brink, Bradley J CIV USARMY CENWK (US) <Bradley.J.Brink@usace.army.mil>; Watts, Joshua A CIV

USARMY CENWK (US) < Joshua. A. Watts@usace.army.mil>

Subject: RE: Pohatcong OU3 PDI Field Activities Status Call Summary - June 5, 2018

Michelle,

Thanks for catching the correction to the meeting minutes.

We are also reviewing existing data to understand what deep soil borings are near the southeastern and eastern side of the building. It appears that we do not have any deep borings on the southeastern or eastern side of the building and only one monitoring well to the east of the building. Brad Brink is going to summarize our existing data, include a few figures, and highlight any data gaps in preparation for our end of June call. We are also thinking through potential impacts to the OU1/OU2 monitoring program.

Erin

----Original Message-----

From: Granger, Michelle [mailto:Granger.Michelle@epa.gov]

Sent: Thursday, June 7, 2018 10:11 AM

To: Stan Popelar < SPopelar@ramboll.com>

Cc: bkennington@ramboll.com; Hauber, Erin M CIV USARMY CENWK (US) < Erin.M.Hauber@usace.army.mil>

Subject: [Non-DoD Source] RE: Pohatcong OU3 PDI Field Activities Status Call Summary - June 5, 2018

Hi, Stan-

Thank you for the call summary. I'd like to request a revision to the call summary, specifically the "Other Items Discussed" section. Please reflect-- a call will be planned (for the end of June) with EPA to discuss results of elevated contamination in SB-25 and SB-26. It was discussed that you would update the EVS model, review results and figure out next steps to characterize the eastern extent of contamination. Please include this in the revised call summary and resend.

Also, I spoke with Kim today and she has expressed that we'll need to discuss on the call in the end of June what

plans you have for additional soil sampling (stepping out from SB-25 and SB-26) to characterize the eastern extent of contamination.
Thank you, Stan.
Michelle-
From: Stan Popelar [SPopelar@ramboll.com]
Sent: Wednesday, June 6, 2018 4:38 PM
To: Oconnell, Kimberly; 'Duckett, Roy (HSE)'; Bruce S Kennington; David T Heidlauf; Michael Kevin Eddings; Kolb, Neal F CIV USARMY CENAN (US); 'luis.hidalgo@riotinto.com'; 'Wendy.E.Stonestreet@usace.army.mil'; 'Joshua.A.Watts@usace.army.mil'; 'Charles.Masson@riotinto.com'; Granger, Michelle; Erin.M.Hauber@usace.army.mil; Scott Tarmann; Brink, Bradley J CIV USARMY CENWK (US); patrick nejand; Lin Zhao
Subject: Pohatcong OU3 PDI Field Activities Status Call Summary - June 5, 2018
Attached is a summary of the items discussed on yesterday's weekly status call.
Regards, Stan
Stanley J. Popelar
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